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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 43982.1-2024

**Plastics piping systems for renovation of underground water
supply networks - Part 1: General**
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting:

This document is Part 1 of GB/T 43982 "Plastic Piping Systems for Trenchless Repair of Underground Water Supply Networks":

The following parts have been published:

--- Part 1: General:

This document is modified to adopt ISO 11298-1:2018 "Plastic piping systems for trenchless rehabilitation of underground water supply networks - Part 1: General":

Compared with ISO 11298-1:2018, this document has many structural adjustments: A comparison of the structural number changes between the two documents See Appendix A for the table:

This document has many technical differences compared to ISO 11298-1:2018:

A list of these technical differences and their reasons is given in Appendix B:

Introduction

According to the application field of the pipeline system to be repaired, the trenchless repair technology is divided into the following technology series:

- Plastic pipe system for trenchless repair of underground non-pressure drainage network;
- Plastic pipe systems for trenchless repair of underground pressure drainage networks;
- Plastic pipe systems for trenchless repair of underground water supply networks;
- Plastic piping system for trenchless repair of underground gas pipeline network:

GB/T 43982 "Plastic Pipe Systems for Trenchless Repair of Underground Water Supply Pipe Networks" specifies the plastic pipe systems for trenchless repair of underground water supply pipe networks:

Requirements for pipelines: GB/T 43982 is intended to consist of the following parts:

- Part 1: General: The purpose is to establish the requirements for plastic pipe systems used for trenchless repair of underground non-pressure drainage networks:

General requirements, overarching principles and relevant rules to be followed:

- Part 2: Continuous interlaced lining method: The purpose is to clarify the applicable materials of the continuous interlaced lining method in production, manufacturing and construction inspection:

Technical requirements for the collection phase:

- Part 3: Tight fit lining method: The purpose is to clarify the applicable materials of the tight fit lining method in production, manufacturing and construction inspection:

Technical requirements for the collection phase:

- Part 4: In-situ curing lining method: The purpose is to clarify the applicable materials of the in-situ curing lining method in production, manufacturing and construction Technical requirements for the collection phase:

Part 1 (General Principles) of each technical series specifies the general requirements for non-excavation repair technology in this field, and the other parts correspond to specific Engineering technology methods (construction methods): Each part (construction method) is used in conjunction with Part 1 (General Principles): This document is used as Part 1 of GB/T 43982 the:2011 Standard specifies general requirements for plastic pipe systems used in the rehabilitation of water supply networks: Since not all technologies (processes) are applicable to every application, Therefore, the components contained in different technical series standards may vary: For further information, see GB/T 37862:

The standard system table in Figure 1 shows the common parts of the non-excavation repair technology system, the relationship between each technology series and its basic constitute:

Figure 1 Standard architecture of plastic pipe system for pipe network repair

Plastic pipe systems for trenchless repair of underground water supply networks Part 1: General

1 Scope

This document specifies the basic concept system and general technical requirements for plastic pipe systems for trenchless repair of underground water supply networks, including M Performance requirements for pipes, fittings and accessories in Phase I and Phase I, as well as technical and quality requirements in the construction and acceptance phases:

This document applies to the production of plastic pipes, fittings and accessories for the repair of underground water supply networks, as well as the construction and acceptance of lining systems:

This document does not apply to the original pipeline body, non-structural spray coatings, and annular gap filling materials between the lining and the original pipeline:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document:

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document:

GB 5749 Sanitary standard for drinking water GB/T 17219 Safety evaluation standard for drinking water transmission and distribution equipment and protective materials GB/T 21873 Rubber seals for water supply, drainage and sewage pipes, interface sealing ring material specification (GB/T 21873-2008,ISO 4633:2002,MOD) GB/T 37862 General principles for plastic pipes for trenchless repair (GB/T 37862-2019, ISO 11295:2017, MOD)